# THE DOLLARS & SENSE OF HUNTING

## **PURPOSE**

To recognize sport hunting as a strategy to protect biodiversity.

## **KERA CONNECTIONS to Life Science**

Core Content: Populations and Ecosystems

Academic Expectations: 2.2 Patterns, 2.3 Systems, 2.6 Change Over

Time

**Process Skills:** Communication, Recognizing Personal Bias, Interpreting Data

## **OBJECTIVES**

Students should be able to:

- 1. describe interactions between different animal populations
- 2. identify hunting as a means of population control
- 3. explain indirect benefits of sport hunting to biodiversity.

## **VOCABULARY**

Teachers may wish to discuss the following terms: excise tax, market hunting, regulation, sport hunting and wildlife management area.

## **aFIELD NOTEBOOK**

**Ideas for Teachers** 

- **A.**Invite a hunter into your classroom for a talk. Encourage your students to interview other hunters in their community. Students should write a narrative recounting one of the hunter's favorite hunting trips. Why did they enjoy this particular trip? Does the storytelling describe the reasons why this hunter hunts?
- **B.**Collect information from other wildlife organizations and their positions on hunting. Invite speakers with other views into your classroom. Have students identify persuasive techniques. Publish a class newspaper including objective news, editorial letters and cartoons about hunting or population control.
- C.Ask students what is meant by the phrase "hunting is the sport of kings." In Europe, wildlife and other natural resources belonged to royalty. Only the rich were financially able and legally allowed to hunt. American revolutionists rebelled against the king, taxation and other royal beliefs. Wildlife in the United States belongs to the people. How did this influence America's wildlife history?
- **D.** THE BUCK STOPS HERE These fiscal year 1991 statistics show the contributions of U.S. hunters to wildlife: \$529,895,000 spent on licenses and permits; for hunting equipment, such as firearms, \$3.267 billion; federal duck stamps added \$21.7 million; and conservation organizations, like the National Wild Turkey Federation, donated \$138,576,000. What would happen to biodiversity without this



## **Program 3**

## ANSWERS TO AFIELD NOTES

- **1.** B
- **2.** A
- 3. The hunter's population also increases after a lag time determined by reproductive cycles.
- **4-5.** Answers will vary. An inverse relationship is apparent in most competing animals. They could also overpopulate and crash at the same time.
- **6.** Lloyd Wildlife Management Area (WMA)
- 7. Daniel Boone National Forest
- 8. Yellowbank WMA
- 9. Ballard County WMA
- **10.** Fort Campbell Military Reservation
- **11.** Answers will vary. Be sure to consider local parks, lakes and streams.
- **12.**\$35
- **13.** Clark's River National Wildlife Refuge
- 14.\$28.38
- **15.** Answers will vary.



## Happy 60th Birthday, P-R

Throw a birthday party for the Federal Aid in Wildlife Restoration Act. Encourage students to create a guest list of famous characters they might invite - Daniel Boone, Franklin D. Roosevelt, perhaps even Elmer Fudd. Research, dress up and role play the guests. Make a music video featuring the song *Happy Birthday*. Decorate the invitations and cake with the P-R logo. Guests could play party games like "Pin the License on the Hunter." They might even hold a comedy roast for Pittman and Robertson.

What would you say to a person who tells you that he is going out to hunt bald eagles?



Send individual or class responses to: **Kentucky Afield for Kids** #1 Game Farm Road **Frankfort, KY 40601** 

E-mail: ntheiss@mail.state.ky.us

- funding? Manufacturers pay the federal aid excise tax directly to the U.S. Treasury, then pass on the cost to consumers. Discuss the difference between wholesale and retail prices.
- **E.** Review the legislative process on how a bill becomes a law. For example, you may document how Senator Mitch McConnell's bill established the Clark's River National Wildlife Refuge. Get involved with the new "Teaming with Wildlife" initiative. Log on to <a href="http://www.gorp.com/teamww">http://www.gorp.com/teamww</a> to find out more about this long-term funding solution for nongame wildlife.
- **F.** Analyze the lyrics of *The Conservation Song*. Does the author sound like a hunter? What story does the writer tell from history? Who are some of the "important people that started turning things around?" What happened during the 1930s to allow sportsmen to pay the bill? What is the main message conveyed by the lyrics? How would you define a sportsman? Students learning a musical instrument, like the recorder, could accompany singers by playing the melody of *Puff the Magic Dragon*.

## Tasks for Students

- 1. Conduct a survey to determine average expenditures for a hunt. In Kentucky, wildlife and outdoor recreation boasts an annual income of \$3.4 billion and supports 52,000 jobs. Which occupations are related to hunting? Is your family supported by money from sport hunting?
- **2.** Write an editorial on whether the typical hunter supports biodiversity.
- **3.** Write a song and produce a music video commemorating wildlife in Kentucky.
- **4.** Enter Kentucky's Junior Duck Stamp Contest. The contest deadline is March 15, 1998. How have waterfowl inspired hunters to conserve biodiversity?

## WILD THINGS FOR TEACHERS

Become a volunteer hunter education instructor. Both hunters and nonhunters alike benefit from topics such as: ethics, wildlife identification, survival, first aid, firearms, ammunition, archery and muzzleloading. Certification, free materials and six one-hour videotapes are available to view "Hunter Education on KET." For groups with 25 or more students, range work may be scheduled.

## **RECOMMENDED RESOURCES**

- \* Posewitz, Jim. *Beyond Fair Chase*. Falcon Press Publishing Co.: Helena, MT, 1994. ISBN 1-56044-283-2.
- \* Kentucky Hunting Guide. Printed annually by the KDFWR.
- \* *The Hunter in Conservation*, 1995. Council for Wildlife Conservation and Education, Inc.: 11 Mile Hill Road, Newtown, CT, 06470-2359.

## ADDITIONAL ACTIVITIES

- \* Project WILD activities "Carrying Capacity" "The Hunter" and "Pro and Con: Consumptive and Nonconsumptive Uses of Wildlife"
- \* "Hunter Education" Kentucky Afield for Kids, November 1994.
- \* "Gun Safety" Kentucky Afield for Kids, November 1995.

## THE DOLLARS & SENSE OF HUNTING

## **CHORD H**

On a planet crowded with life forms, **harmony** is essential. One chord that organizes these pleasing relationships is hunting. Hunting? Images of a red-tailed hawk zeroing-in on a rabbit come to mind. Good for the hawk, but not-so-good for the rabbit. Or is it?

For the individual being hunted, hunting seems harsh and cruel. Yet, to have life, death is necessary and important. Survival, on a larger scale, is linked to populations rather than individuals. Released in an area with few predators, rabbits soon overpopulate. The plants that rabbits eat disappear. Other species are affected by a loss of plants. Mosquitos, groundhogs, bison and other grazers go hungry. Then gray bats may have no mosquitos to eat. Without bat wastes, cave critters run out of fuel. The chain reaction goes on. Eventually many individual rabbits and other species die anyway of starvation and disease. Hunting helps maintain harmony by keeping plant and animal populations in balance.

## WHY DO PEOPLE HUNT?

Ask this question of hunters and you'll get many different answers. Throughout history, humans have hunted for food, clothing and other items needed for survival.

Market hunting, like commercial angling, was a way of life for Annie Oakley and other early Americans. Today's



hunters cite reconnecting with nature, sharing a family tradition, relaxation and recreation as reasons to hunt.

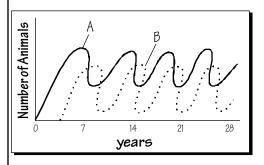
Humans are important predators now that cougars, wolves and bears are no longer part of the equation. In ten years with no hunting, Kentucky's white-tailed deer population would leap to two million animals. Vehicle collisions would increase from 4,000 to 32,000 annually. As natural food supplies ran out, deer would eat more than 9 billion pounds of crops. Sport hunters create equilibrium between wildlife populations, habitat and human needs.



## aFIELD NOTES

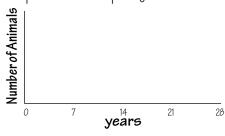
**November 5, 1997** 

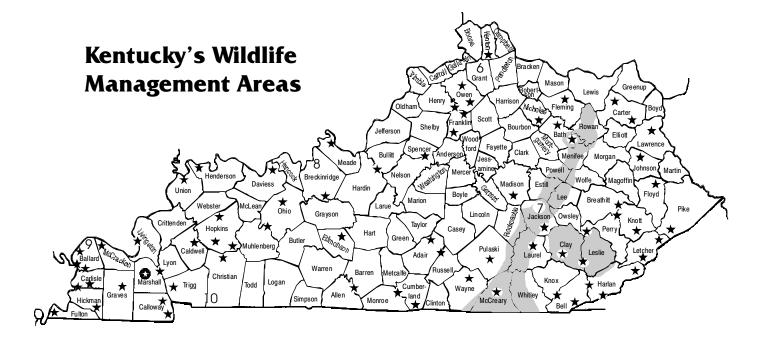
Analyze this population graph.



- 1. Which animal is the hunter?
- 2. Which is being hunted?
- 3. What happens to the hunter's population when the prey's population increases?

4-5. How would a graph look with two competing plant-eaters and no predators? Explain your answer.





## BIODIVERSITY MILESTONES

#### 1872

Yellowstone National Park established.

#### 1889

Bison hunting stopped.

## 1892

Pres. Benjamin Harrison signed order for first wildlife refuge at Afognak Forest and Fish Culture Reserve, Alaska.

#### 1903

Pres. Theodore Roosevelt created Pelican Island Wildlife Reserve. Florida.

## 1929

Migratory Bird Conservation Act provides refuges for migrating birds.

## 1937

Federal Aid in Wildlife Restoration program taxes hunting equipment.

## 1944

Kentucky Division of Game and Fish created.

## 1997

Senator McConnell's bill establishes the Clark's River National Wildlife Refuge, Kentucky.

## **HUNTERS AS AMERICA'S FIRST CONSERVATIONISTS**

As human population increased and wildlife decreased, hunters led the fight to protect remaining wildlife species. National leaders, like Gifford Pinchot and George Grinnell, along with legislators worked to find long-term solutions to the loss of wildlife diversity. Hunters voted to ban market hunting and place user-fees on sport hunting. Additional funds were raised through license sales. Conservationists set their sights on establishing parks, refuges and wildlife management areas. With the combined efforts of research, law enforcement, wildlife management and **regulated hunting**, many animal populations rebounded to healthy levels.

The KDFWR manages about 1.5 million acres (less than 3% of Kentucky) for wildlife and owns 75,000 acres.

Using a state highway map, identify these public hunting areas.

6.	
7.	
9.	
10.	
11. L	ocate public wildlife areas in your county.

## THE BUCK STOPS HERE - INCOME FROM HUNTING



Why is the dollar bill also nicknamed a buck? Deerskins were traded like money. The sport of deer hunting still raises money for state wildlife agencies. Kentucky hunters contribute \$8 million annually

through licenses and permits.

Backed by hunters nationwide, Nevada Senator Key Pittman and Virginia Congressman A. Willis Robertson sponsored the Federal Aid in Wildlife Restoration Act in 1937. Manufacturers pay an 11% excise tax on sporting firearms, ammunition and archery tackle to a special fund exclusively for wildlife conservation programs. An additional 10% tax on handguns helps finance hunter education programs. The Federal Aid in Wildlife Restoration Act (or P-R, short for Pittman and Robertson) has contributed more than \$3.6 billion to state wildlife agencies over the past 60 years. Studies funded through P-R, such as those on lead shot toxicity and forest habitat improvement, benefit game animals as well as nongame species. Hunters continue to pay to protect biodiversity.

12. If a hunting license costs \$12.50, a Kentucky Waterfowl Stamp \$7.50 and a federal duck stamp \$15, how much money does a Kentucky goose hunter contribute to wetlands conservation?

Along with the Migratory Bird Conservation Act, money raised from federal duck stamps purchases national wildlife refuges.

13. What is the name of the newest national wildlife refuge ♥ located in Kentucky?

14. The manufacturer valued the goose hunter's shotgun at \$250 and steel ammunition at \$8. How much P-R excise tax was collected from the goose hunter's equipment?

## DO YOU HELP PAY FOR WILDLIFE?

In Kentucky, many people do not pay for conservation. Hunters, anglers and donors to special programs (Nature License Plate and Nature and Wildlife Income Tax Fund) contribute the most to wildlife. Nonhunters may pay for wildlife, too, by supporting legislation that increases state sales tax or an excise tax on outdoor-related products.



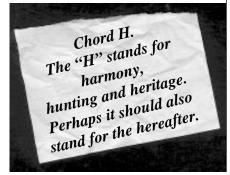


15.Would you vote to raise taxes if
you knew the money was going to
wildlife? Why or why not?



Fish and Wildlife Program Leader, Rodger Coombs combines his love for music with the outdoors to convey a special conservation message. The Backwoods to Backyards slide show includes interactive "bluegrass" songs that educate, as well as entertain, students about Kentucky's wildlife resources. The 45-minute performance is offered free for school assemblies.







## **The Conservation Song**

lyrics by Rodger Coombs sing to the tune of *Puff the Magic Dragon* 

God made the wildlife for you and me most of us don't understand conservation is the key. The wildlife of Kentucky are important, you see if it wasn't for the sportsman, I wonder where they'd be.

First settled this country an abundance was seen cougar, bear, deer and elk, the passenger pigeon all kinds of birds, fish, mammals and clean streams. They said it would never end but it vanished like a dream.

Oh, God made the wildlife for you and me most of us don't understand conservation is the key. The wildlife of this nation are important, you see if it wasn't for the sportsman, I wonder where they'd be.

Turn of the century conservation was not known, nobody seemed to care that everything was gone. But then some important people started turning things around, started thinking about our environment started building, not tearing down.

Oh, God made the wildlife for you and me most of us don't understand - conservation is the key. The wildlife of this country are important, you see if it wasn't for the sportsman, I wonder where they'd be.

Since the 1930s, sportsmen paid the bill wildlife are returning to the forest, lakes and fields. Some people don't know, some don't want to share for wildlife to continue on - everyone must care.

Oh, God made the wildlife for you and me most of us don't understand - conservation is the key. Some people don't know, some don't want to share for wildlife to continue on EVERYONE MUST CARE!

*The Conservation Song*, copyrighted 1992 by Reid & Walls, published courtesy of Music Man Records, P.O. Box 303, Springfield, KY 40069.